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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,603

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Kyoko Kobayashi

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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,603

Applicant(s)

KOBAYASHI ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-40 and 42-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-13, 15-40 and 42-51 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The art rejections over EP 974 617 in view of Bordner et al (US 3,624,964) are considered moot in view of the cancellation of claims 2, 3 and 41.
2. The art rejections over EP 974 617 in view of EP 976 782 are maintained.
3. The indicated allowability of claims 4-19 and 42-46 is withdrawn in view of EP 974 617 and EP 976 782 (see rejections below).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 4-13, 15-40, and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 974 617 in view of EP 976 782. Yorita et al (US 6,303,666) ("Yorita") is relied on as an equivalent form of EP 976 782. With regard to claims 4-19 and 42-46, EP'617 teaches a laminate for use in glass run channels comprising a core and a skin member being bonded to the core. EP'617 teaches the skin member made of an ultrahigh molecular weight polyolefin having an intrinsic viscosity within the claimed range [0103]. EP'617 also teaches the skin member comprising an olefin thermoplastic elastomer and at least one kind of lubricant recited by the claims (abstract). EP'617 also teaches the olefin thermoplastic elastomer used in the skin layer comprising a mixture of the crystalline polyolefin resin and the rubber to a dynamic heat treatment [0071] in the presence of a cross-linking agent (abstract). EP'617 teaches the core being an olefin thermoplastic elastomer. EP'617 is silent as

to the core being a foamed body of the olefin thermoplastic elastomer. Yorita, however, teaches a production of expanded olefinic thermoplastic elastomer for use in weather strip sponges (column 27, line 49). Yorita teaches the weather strip sponge comprising a foamed body made of a thermoplastic elastomer (A) and the olefinic plastic (B) in proportions of from 50-99 parts by weight and 1 to 50 parts by weight respectively (column 13, lines 5-15) wherein the thermoplastic elastomer (A) comprises a crosslinked olefin copolymer (a) and a decomposable olefin plastic (b) (column 8, lines 20-25). The crosslinked olefin copolymer (a) of Yorita corresponds to the Applicants' copolymer based on ethylene/alpha-olefin (a-2), (j-2) whereas the olefinic plastic (B) of Yorita corresponds to Applicants' polyethylene resin (a-1) or Applicants' polyolefin resin (j-1). Notably, the decomposable olefin plastic (b) corresponds to Applicants' olefinic thermoplastic resin (K) or Applicant's polypropylene resin (a-3). Yorita teaches the crosslinked olefin copolymer (a) having the composition and a Mooney viscosity as required by the claims (column 7, lines 60-65; column 8, lines 10-15). Yorita teaches the olefinic plastic (B) being a homogeneous polyethylene resin or homogeneous polypropylene resin (column 12, lines 37-45). Yorita teaches the expanded olefinic thermoplastic elastomer product comprising 2 parts by weight of the foaming agent (table 3). Table 1 of Yorita shows that the expanded olefinic thermoplastic elastomer product having the foaming expansion ratio of 2 times. Yorita teaches the a decomposable olefin plastic (b) comprising a polypropylene resin or a polypropylene/alpha-olefin copolymer in an amount of 5 to 40 parts by weight based on 100 parts by weight of the crosslinked

thermoplastic elastomer (a) and the decomposable olefin plastic (b) (column 8, lines 20-25, 43 and 59). Likewise, the polypropylene resin (b) is present in an amount of 2.5 to 20 parts by weight based on 100 parts by weight of the olefinic thermoplastic elastomer (a combination of (a), (b) and (B)). This reads on Applicant's polypropylene resin (a-3) in an amount of 30 parts by weight or less per 100 parts by weight of total sum of the polyethylene resin (a-1) and the copolymer based on ethylene/alpha-olefin (a-2). Similarly, this reads on Applicant's olefinic thermoplastic resin (K) in an amount of 1-20 parts by weight or less per 100 parts by weight of the olefinic thermoplastic elastomer (J). It appears that Yorita uses the olefin thermoplastic elastomer having the composition with the amount of each individual component similar to that of the present invention. Therefore, it is the examiner's position that the compression set and melt flow rate of the olefinic thermoplastic elastomer of the expanded product would be inherently present. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Yorita teaches the expanded olefinic thermoplastic elastomer products excellent in flexibility, heat resistance, which is important to expectation of successfully practicing the invention of EP'617, thus further suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the core of EP'617 with the expanded olefinic thermoplastic elastomer product as taught by Yorita motivated by the desire to provide the glass run channel excellent in flexibility, and heat resistance.

Yorita teaches the expanded olefinic thermoplastic elastomer comprising 5 to 80 parts by weight of a softening agent per 100 parts by weight of the sum of crosslinked olefin copolymer (a) and the decomposable olefin plastic (b) to make it possible to sufficiently improve the flowability of the thermoplastic elastomer without reducing the heat resistance and tensile characteristics of an expanded product (column 9, lines 60-63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the softening agent in the foam core motivated by the desire to provide improved flowability of the thermoplastic elastomer without reducing the heat resistance and tensile characteristics of the core.

Allowable Subject Matter

6. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Yorita discloses the olefinic thermoplastic elastomer comprising a crosslinking olefin copolymer corresponding to the presently claimed copolymer based on ethylene/alpha-olefin (a-2). One of skilled in the art would not be motivated to form the substrate layer in the absence of a cross-linking agent because to do so would defeat the purpose of the formation of the crosslinking olefin copolymer as required by the Yorita invention.

Response to Arguments

7. The art rejections over EP 974 617 in view of EP 976 782 have been maintained for the following reasons. Applicants argue that one of skilled in the art would not be

motivated to combine the teachings of EP'617 with those of EP'782 since the two inventions have different technical goals. EP'617 limits the teachings to improvements in the performance of a sling glass window on a non-foamed olefinic thermoplastic elastomer skin member whereas EP'782 discloses a foamed product having many uses; however, none of which includes glass run channels for sliding glass windows. Applicants further argue that EP'617 is concerned to abrasion resistance of the skin member and occurrence of a "die residue" upon extrusion molding of such a skin member while EP'782 is completely silent as to the glass window sliding performance, abrasion resistance and occurrence of a "die residue". The arguments are not found persuasive for patentability for two reasons. First, Yorita or EP'782 teaches a production of expanded olefinic thermoplastic elastomer for use in weather strips. It is known in the art that weather strips are associated with glass run channels to form the sealing unit of an automobile. The weather strip and glass run channel, each are sealing components of automobile. Likewise, it is respectfully submitted that EP'617 and EP'782 are in analogous art. The motivation for the combination of EP'782 and EP'617 may be different than the discovery of the present invention. However, such can not be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicants argue that the inventive olefinic thermoplastic resin (K) is used in a proportion of 1-20 parts by weight of the component (J). This is in distinction to the olefin plastic (B) of EP'785. Applicants' attention is directed to the discussion in the

paragraph no. 5. The decomposable olefin plastic (b) of Yorita corresponds to Applicants' olefinic thermoplastic resin (K) instead. Yorita teaches the weather strip sponge comprising a foamed body made of a thermoplastic elastomer (A) and the olefinic plastic (B) in proportions of from 50-99 parts by weight and 1 to 50 parts by weight respectively (column 13, lines 5-15) wherein the thermoplastic elastomer (A) comprises a crosslinked olefin copolymer (a) and a decomposable olefin plastic (b) (column 8, lines 20-25). The crosslinked olefin copolymer (a) of Yorita corresponds to the Applicants' copolymer based on ethylene/alpha-olefin (a-2), (j-2) whereas the olefinic plastic (B) of Yorita corresponds to Applicants' polyethylene resin (a-1) or Applicants' polyolefin resin (j-1). Notably, the decomposable olefin plastic (b) corresponds to Applicants' olefinic thermoplastic resin (K) or Applicant's polypropylene resin (a-3). Yorita teaches the crosslinked olefin copolymer (a) having the composition and a Mooney viscosity as required by the claims (column 7, lines 60-65; column 8, lines 10-15). Yorita teaches the a decomposable olefin plastic (b) comprising a polypropylene resin or a polypropylene/alpha-olefin copolymer in an amount of 5 to 40 parts by weight based on 100 parts by weight of the crosslinked thermoplastic elastomer (a) and the decomposable olefin plastic (b) (column 8, lines 20-25, 43 and 59). Likewise, the polypropylene resin is present in an amount of 2.5 to 20 parts by weight based on 100 parts by weight of the olefinic thermoplastic elastomer (a combination of (a) +(b) + (B)). This reads on Applicant's olefinic thermoplastic resin (K) in an amount of 1-20 parts by weight or less per 100 parts by weight of the olefinic thermoplastic elastomer (J). Further, Applicants go on

and state that the inventive foamed laminate containing a foamed body substrate layer has unexpectedly superior properties to the laminate of EP'617 based on the data formulated in table 2 of the present invention. The evidence is not found persuasive since it is not commensurate in scope with the claims. Nothing in the claims is specific about "no wear found" and "spongy hand touch". Accordingly, the art rejections are thus sustained.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai Vo
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